**Eureka Math *A Story of Units***

**Third Grade – Module 3**

**2015-2016**

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Based on Version 3 Assessment.

**Module Assessment Overview**

**Purpose of Assessments**

**Mid-Module Assessment:** These tasks address approximately the **first half** of the module’s learning objectives, and provide important information for instruction and for grading.

**End-of-Module Assessment:** These tasks are based on all standards addressed in order to gauge students’ full range of understanding of the **module as a whole**. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Administration of Assessments**

* Mid- and End-of-Module Assessments are designed to be completed in approximately one class period. However, The tests can be given over multiple days as needed.
* Assessments are designed to be completed independently by students, without assistance.
* These tasks should not be preceded by review of similar problems.

**Grading Guidance**

The grading scale on Elementary Report Cards has been changed for 2015-2016 and beyond. Please note that ***4 now indicates advanced understanding of grade level standards expected at this time of year.***

**4 – Advanced:** Student demonstrates advanced understanding of grade level standards expected at this time of year.

**3 – Proficient:** Student demonstrates proficiency with grade level standards expected at this time of year*.*

**2 – Basic:** Student demonstrates basic understanding of grade level standards expected at this time of year. Student needs additional support and practice.

**1 – Below Basic:** Student demonstrates minimal understanding of grade level standards expected at this time of year. Student needs significant support and practice.

**Rubrics and Checklists have been updated to reflect this change. Rubrics have been further modified from Eureka Math originals for clarity, accuracy, and alignment to Bethel’s grade scale.**

**General Grading Guidance:**

* On the report card, student learning is reported by CCSS domain. The Third Grade CCSS domains are: Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations – Fractions, Measurement and Data, and Geometry.
* Grades in each domain should be based on multiple sources of evidence, including the Mid- and End-of-Module Assessments. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Module 3 Grading Guidance:**

* The standards assessed in Module 3 will not be assessed again.

**Updates**

See “Grading Guidance” for updates on Bethel’s grade scale and changes to Eureka Math Assessments.

**Grade 3 Common Core State Standards Checklist by Module**

This grade-level chart provides an at-a-glance view of when each standard is addressed. **Shaded boxes indicate standards that are first assessed in Module 3.** *Note that standards included in major clusters are followed by an asterisk (\*)*. Please refer to the Curriculum Overview of *A Story of Units* for a curriculum map and detailed grade-level descriptions including a summary of the year, a rationale of the module sequence, and a standards alignment chart.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CCSS | | GRADE 3 MODULES | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3.OA | 1\* | X |  |  |  |  |  |  |
| 2\* | X |  |  |  |  |  |  |
| 3\* | X |  | X |  |  |  |  |
| 4\* | X |  | X |  |  |  |  |
| 5\* | X |  | X |  |  |  |  |
| 6\* | X |  |  |  |  |  |  |
| 7\* | X | X | X |  |  |  |  |
| 8\* | X |  | X |  |  |  |  |
| 9\* |  |  | X |  |  |  |  |
| 3.NBT | 1 |  | X |  |  |  |  |  |
| 2 |  | X |  |  |  |  |  |
| 3 |  |  | X |  |  |  |  |
| 3.NF | 1\* |  |  |  |  | X |  |  |
| 2a\* |  |  |  |  | X |  |  |
| 2b\* |  |  |  |  | X |  |  |
| 3a\* |  |  |  |  | X |  |  |
| 3b\* |  |  |  |  | X |  |  |
| 3c\* |  |  |  |  | X |  |  |
| 3d\* |  |  |  |  | X |  |  |
| 3.MD | 1\* |  | X |  |  |  |  |  |
| 2\* |  | X |  |  |  |  |  |
| 3 |  |  |  |  |  | X |  |
| 4 |  |  |  |  |  | X | X |
| 5a\* |  |  |  | X |  |  |  |
| 5b\* |  |  |  | X |  |  |  |
| 6\* |  |  |  | X |  |  |  |
| 7a\* |  |  |  | X |  |  |  |
| 7b\* |  |  |  | X |  |  |  |
| 7c\* |  |  |  | X |  |  |  |
| 7d\* |  |  |  | X |  |  |  |
| 8 |  |  |  |  |  |  | X |
| 3.G | 1 |  |  |  |  |  |  | X |
| 2 |  |  |  |  | X |  |  |

**Third Grade Module 3: Mid-Module Assessment Task Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little or no evidence of reasoning with an incorrect answer.  (1 Point) | Evidence of some reasoning with an incorrect answer.  (2 Points) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | Evidence of solid reasoning with a correct answer.  (4 Points) |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 3: Mid-Module Assessment** | | | | | | |
| **Domain** | | | **Standards** | | | |
| Question | Operations and Algebraic Thinking | | | 3.OA.3 | 3.OA.4 | 3.OA.5 | 3.OA.9 |
| 1 | 1 2 3 4 | | | X | X |  |  |
| 2 | 1 2 3 4 | | | X | X |  |  |
| 3 | 1 2 3 4 | | |  |  | X |  |
| 4 | 1 2 3 4 | | | X | X | X | X |
|  | | |  |  |  |
| Domain  Score | Operations and Algebraic Thinking | | |  | |
| Total Points |  | | |
| Level | 4 | 14-16 points | |
| 3 | 10-13 points | |
| 2 | 6-9 points | |
| 1 | 4-5 points | |

Note: For more information about standards assessed in this module, see back of this score sheet.

Notes:

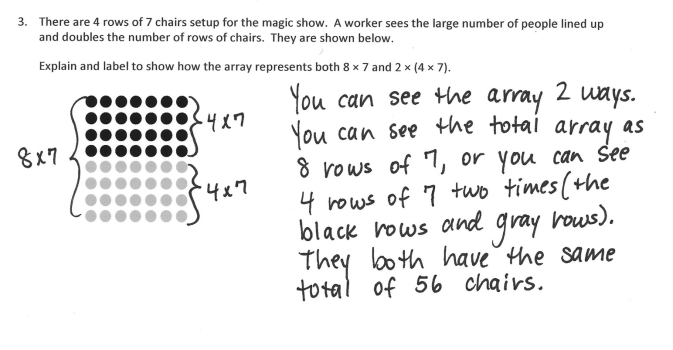
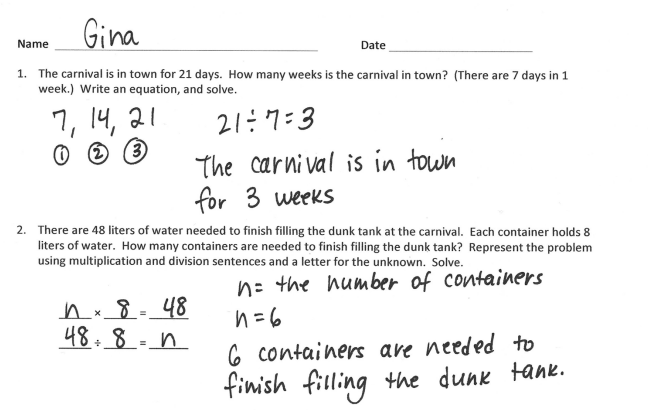
**Third Grade Module 3: Mid-Module Assessment Task Score Sheet (continued)**

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| --- |
| Mid- Module Assessment Task (Topics A–C)  Clusters and Standards Addressed |
| Represent and solve problems involving multiplication and division.  **3.OA.3** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.(See Glossary, Table 2.)  **3.OA.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers.  *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = \_ ÷ 3, 6 × 6 = ?.*  Understand properties of multiplication and the relationship between multiplication and division.  **3.OA.5** Apply properties of operations as strategies to multiply and divide.(Students need not use formal terms for these properties.) *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*  Solve problems involving the four operations, and identify and explain patterns in arithmetic.  **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.* |

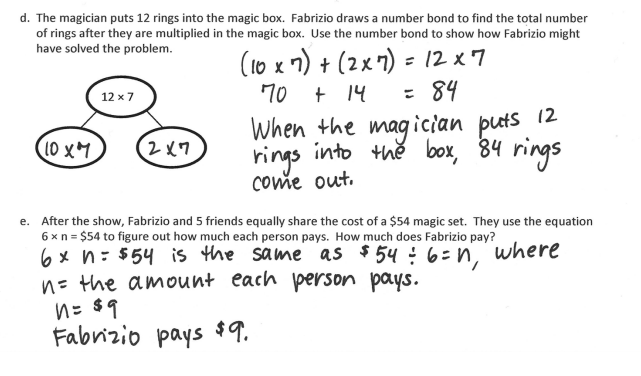
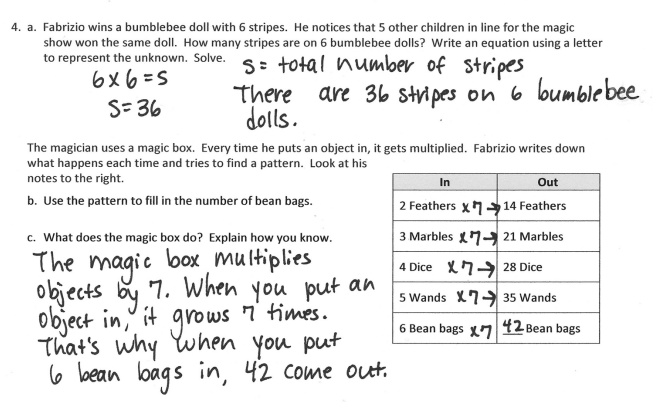
**Third Grade Module 3: Mid-Module Assessment Task Rubric**

| A Progression of Learning | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item  and  Standards Assessed | STEP 1  Little or no evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **1**  3.OA.3  3.OA.4 | Student is unable to write an equation for the problem. The attempt shows the student may not understand the meaning of the question. | The student mixes up the order of numbers in the division sentence (e.g., 21 ÷ 3 = ?) or solves 21 ÷ 7 incorrectly. | The student:   * Writes 21 ÷ 7 = 3 * Does not identify that the answer represents the number of weeks. | The student correctly:   * Writes 21 ÷ 7 = 3 * Identifies that the answer represents the number of weeks. |
| **2**  3.OA.3  3.OA.4 | Student is unable to answer any part of the question correctly. | The student correctly answers **1** of the three parts. | Student correctly answers **2** of the three parts. | The student correctly answers **3** of the three parts. (See below.) |
| 1. Writes *n* × 8 liters = 48 liters. 2. Writes 48 liters ÷ 8 liters = *n*. 3. Solves to find 6 containers. | | | |
| **3**  3.OA.5 | Student is unable to explain and label how the array represents both expressions. | Student attempts to explain and label how the array represents one of the expressions. | Student accurately labels how the array represents both expressions, but explanation lacks clarity. | Student accurately explains and labels how the array represents both expressions, showing understanding of the associative property of multiplication. |
| **4**  3.OA.3  3.OA.4  3.OA.5  3.OA.9 | Student answers **0-2** parts correctly. | Student answers **3-4** parts correctly. | Student answers **5-6** of the seven parts. | The student correctly answers **7** of the seven parts. (See below.) |
| a. **(1)** Writes an equation using a letter to represent the total number of stripes **(2)** and solves 6 × 6 = *b*; *b* = 36  b. **(3)** Fills in 42 bean bags in the chart, and **(4)** Accurately explains how the magic box multiplies objects by 7  c. **(5)** Uses a number bond to break apart the 12 × 7 and distribute to find the total number of rings,  **(6)** finds total of 84 rings  d. **(7)** Writes *n* = $9 | | | |

**Third Grade Module 3: Mid-Module Assessment Task Key**



**Third Grade Module 3: Mid-Module Assessment Task Key (continued)**



**Third Grade Module 3: End-of-Module Assessment Task Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

Note: Problem 5 is scored differently since it is a timed assessment of fluency. Students complete as many problems as they can in 100 seconds. Although this page of the assessment contains 40 questions, answering 30 correct within the time limit is considered passing.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little or no evidence of reasoning with an incorrect answer.  (1 Point) | Evidence of some reasoning with an incorrect answer.  (2 Points) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | Evidence of solid reasoning with a correct answer.  (4 Points) |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 3: End-of-Module Assessment** | | | | | | | | | | | |
|  | **Domain** | | | | | **Standards** | | | | | | |
| Question | Operations and Algebraic Thinking | | Number and Operations in Base Ten | | | 3.OA.3 | 3.OA.4 | 3.OA.5 | 3.OA.7 | 3.OA.8 | 3.OA.9 | 3.NBT.3 |
| 1 | 1 2 3 4 | |  | | | X | X |  |  |  |  |  |
| 2 | 1 2 3 4 | |  | | | X | X |  |  | X |  |  |
| 3 | 1 2 3 4 | |  | | |  |  |  |  |  | X |  |
| 4 | 1 2 3 4 | | 1 2 3 4 | | | X | X | X |  | X | X | X |
| 5 | 1 2 3 4 | |  | | |  |  |  | X |  |  |  |
|  | | |  |  | | Note: For more information about standards assessed in this module, see back of this score sheet. | | | | | | |
| Domain  Score | Operations and Algebraic Thinking | | Number and Operations in Base Ten | | |
| Total Points |  | |  | | |
| Level | 4 | 18-20 points | 4 | | 4 points |
| 3 | 13-17 points | 3 | | 3 points |
| 2 | 8-12 points | 2 | | 2 points |
| 1 | 5-7 points | 1 | | 1 point |

Notes:

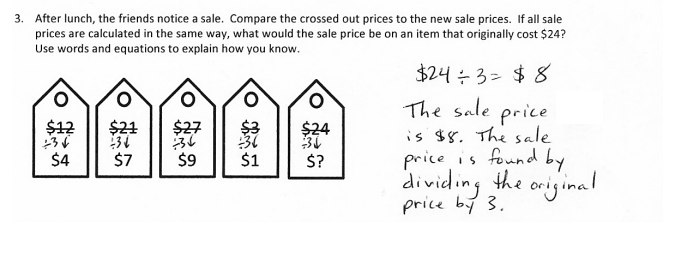
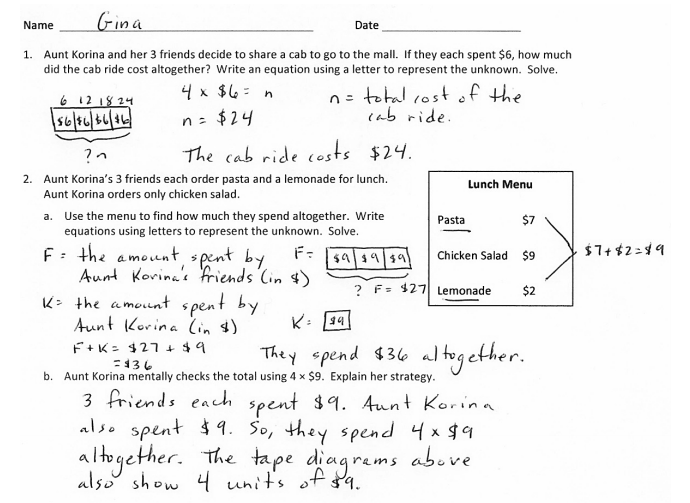
**Third Grade Module 3: End-of-Module Assessment Task Score Sheet (continued)**

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| --- |
| End-of-Module Assessment Task (Topics A–F)  Clusters and Standards Addressed |
| Represent and solve problems involving multiplication and division.  **3.OA.3** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.(See Glossary, Table 2.)  **3.OA.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers.  *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = \_ ÷ 3, 6 × 6 = ?.*  Understand properties of multiplication and the relationship between multiplication and division.  **3.OA.5** Apply properties of operations as strategies to multiply and divide.(Students need not use formal terms for these properties.) *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*  Multiply and divide within 100.  3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.  Solve problems involving the four operations, and identify and explain patterns in arithmetic.  **3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)  **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*  Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used.)  **3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations. |

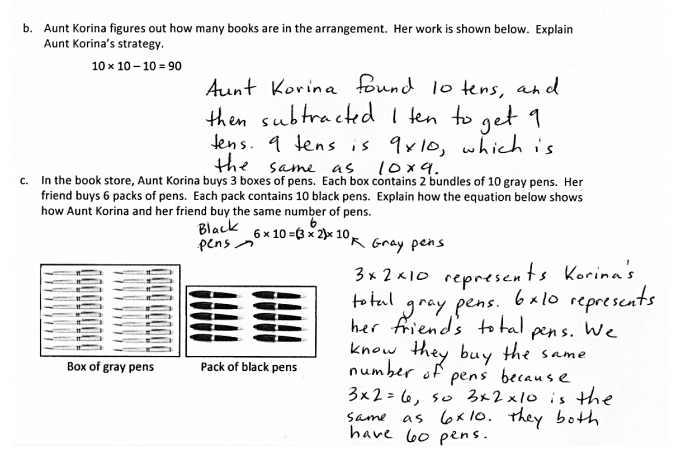
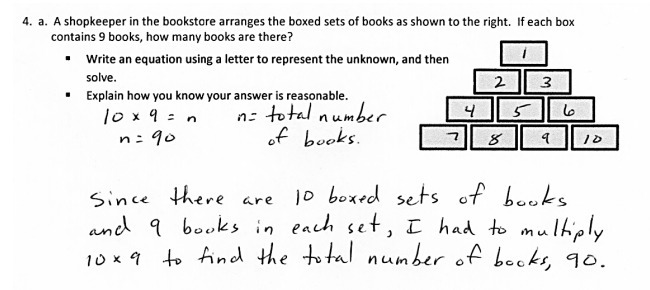
**Third Grade Module 3: End-of-Module Assessment Task Rubric**

| A Progression of Learning | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item  and  Standards Assessed | STEP 1  Little or no evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **1**  3.OA.3  3.OA.4 | Student is unable to write and solve an equation. | Student writes a multiplication equation using the incorrect factors and without a letter to represent the unknown. | Student writes a multiplication equation using a letter to represent the unknown but calculates an incorrect answer (e.g., 4 × $6 = *n*; *n* = wrong answer). | The student correctly:   * Writes and solves  4 × $6 = *n*; *n* = $24. |
| **2**  3.OA.3  3.OA.4  3.OA.8 | Student is unable to answer either question correctly. | Student correctly answers **1** of the three parts. | Student correctly answers **2** of the three parts. | The student correctly answers **3** of the three parts. (See below.) |
| a. **(1)** Writes equations using letters to represent the unknown. (e.g., F = the amount in dollars spent by Aunt Korina’s friends, K = the amount in dollars spent by Aunt Korina; F + K = $27 + $9 = $36).  a. **(2)** Finds the total, $36.  b. **(3)** Provides accurate explanation of strategy. | | | |
| **3**  3.OA.9 | Student is unable to explain the pattern. | Student attempts to find and explain the pattern. | Student understands how the sale prices are calculated but incorrectly finds the sale price of $24 (e.g., $24 ÷ 3 = wrong answer). | The student clearly:   * Explains the sale prices are calculated by dividing the original price by 3. * Writes $24 ÷ 3 = $8. |
| **4**  3.OA.3  3.OA.4  3.OA.5  3.OA.8  3.OA.9  3.NBT.3 | Student correctly answers **0-1** of the six parts. | Student correctly answers **2-3** of the six parts. | Student correctly answers **4-5** of the 6 parts. | The student correctly answers **6** of the six parts. (See below.) |
| a. **(1)** Writes 10 × 9 = *n*; **(2)** solves n = 90. **(3)** Provides accurate explanation of the equation.  b. **(4)** Provides accurate explanation of the 10 = 9 – 1 pattern.  c. **(5)** Provides accurate explanation of the associative property of multiplication **(6)** finds 60 pens altogether.  Use this rubric to double score #4 in both OA and NBT. | | | |
| **5**  3.OA.7 | Use the attached sample work to correct students’ answers on the fluency page of the assessment.  **4:** 36 – 40 correct **3:** 30 – 35 correct **2:** 15 – 29 correct **1:** 0 – 14 correct  **Students who answer 30 or more questions correctly within the allotted time “pass” this portion of the assessment.**  They are ready to move on to the more complicated fluency page given with the Module 3 End-of-Module Assessment. For students who do not pass, you may choose to re-administer this fluency page with each subsequent end-of-module assessment until they are successful.  Analyze the mistakes students make on this assessment to further guide your fluency instruction. Possible questions to ask as you analyze are:   * Did this student struggle with multiplication, division, or both? * Did this student struggle with a particular factor? * Did the student consistently miss problems with the unknown in a particular position? | | | |

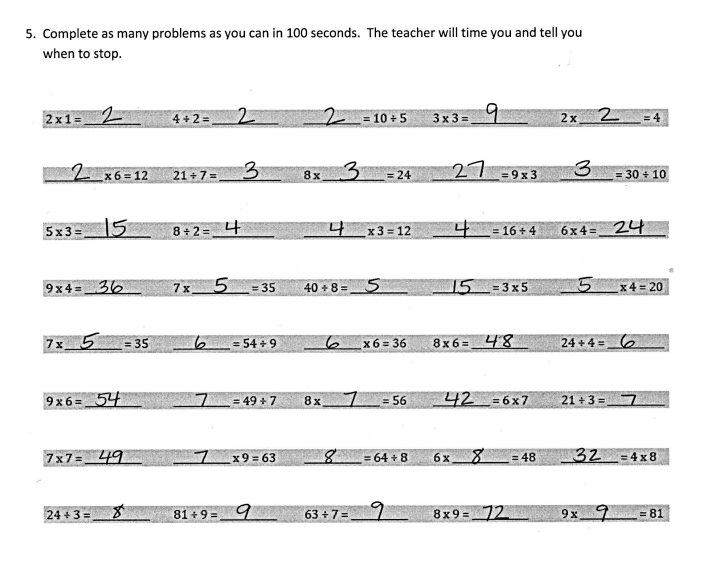
**Third Grade Module 3: End-of-Module Assessment Task Key**



**Third Grade Module 3: End-of-Module Assessment Task Key (continued)**



**Third Grade Module 3: End-of-Module Assessment Task Key (continued)**

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